
Mitten, A Scenario-Based Consensus Protocols Testing Tool

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Résumé

Mitten is a man-in-the-middle proxy between a set of nodes, designed to describe and run tests against consensus protocols implementations. It is configurable to filter and examine network messages according to given scenarios written in a DSL built on OCaml.

Mitten enables writing and simulating subtle cases to reproduce behaviors that are difficult to exhibit under normal circumstances. For instance, we successfully used it to test various corner cases, improvements, and fixes of Tenderbake, the new PBFT consensus protocol of the Tezos blockchain.

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